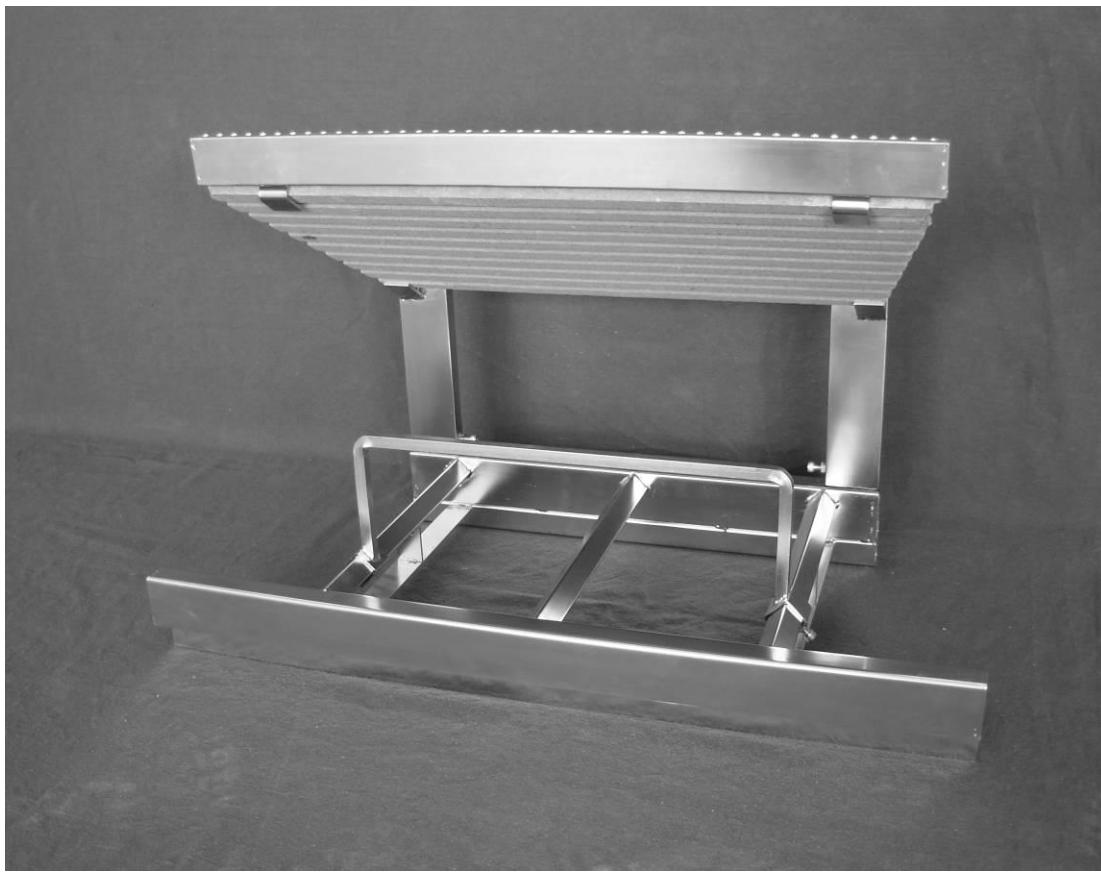


**EARTH'S FLAME FIREPLACE GRATE**  
**INSTALLATION AND OPERATION INSTRUCTIONS**



**Earth's Flame, Inc 440 E. Harrison Street Corona, CA 92879  
PH & FX: 1-888-201-8805 [www.earthsflame.com](http://www.earthsflame.com)**

## Safety Warnings

### SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install, operate, and maintain your appliance it also contains information that will enable you to obtain replacement parts or accessories when needed. Keep it with your other important papers.

### **WARNING**

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

**Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**

### **WARNING**

**MAKE SURE THE CHIMNEY FLUE IS FULLY OPEN BEFORE ATTEMPTING TO OPERATE THIS DEVICE.**

Use of this device with the fireplace damper closed or restricted, or for other than its intended purpose may result in fire, explosion, or carbon monoxide poisoning and possible injury, property damage or loss of life.

### **WARNING**

Improper installation, adjustment, or alteration of the Earth's Flame product can cause injury, property damage or loss of life. Refer to this manual for assistance or additional information. Consult a qualified installer or local distributor.

### **WARNING**

Earth's Flame is not responsible for existing conditions that might result in malfunctions or operation problems. Please have your fireplace properly evaluated by a qualified professional prior to the installation of this product.

### **US & Canadian Codes**

Follow all local codes and regulations adopted by the local Authority having Jurisdiction. If there is a conflict between codes and manufacturer's specifications, the most restrictive shall apply.

**INSTALLER:** LEAVE THESE INSTRUCTIONS WITH THE CONSUMER

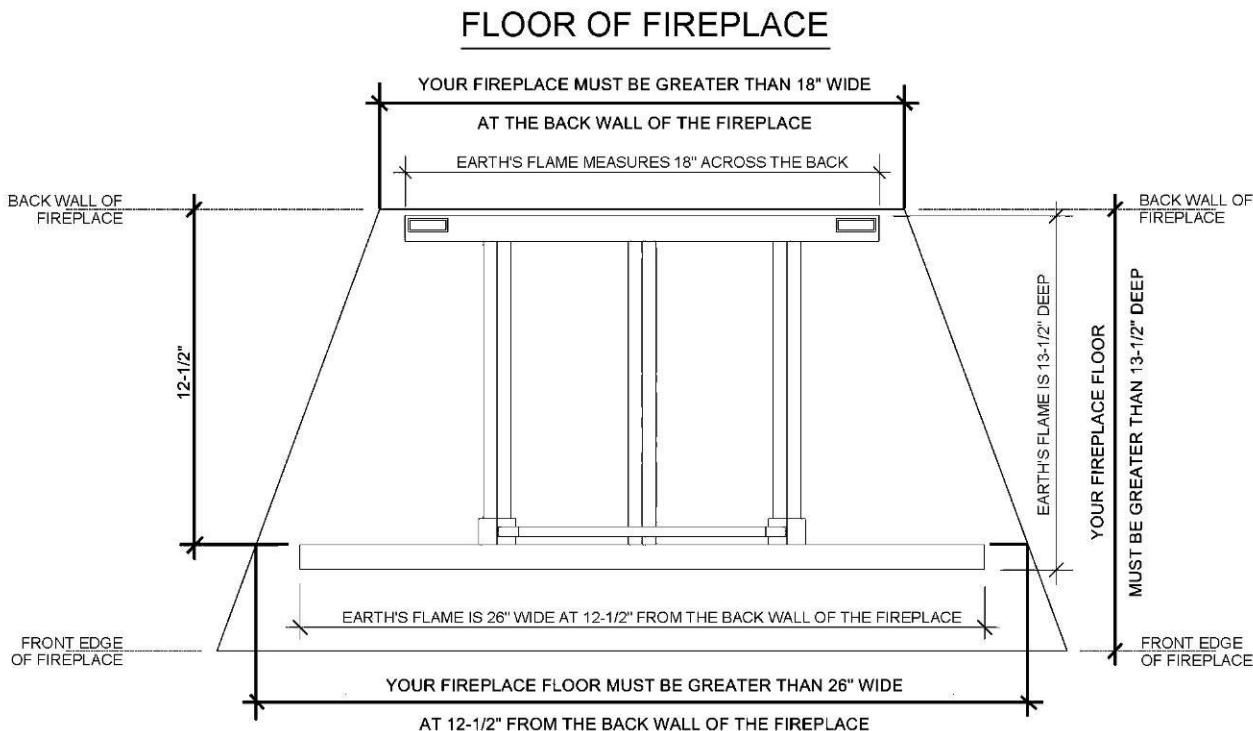
**CONSUMER:** RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Congratulations on your purchase of an Earth's Flame fireplace grate. Earth's Flame has been tested and shown to reduce harmful emissions to the environment, increase radiant heat from your fireplace, and reduce Carbon Monoxide spillage into your living space. If you have not done so already, you need to determine that Earth's Flame will fit properly within your fireplace and operate safely.

## ***Will Earth's Flame Fit in My Fireplace?***

Earth's Flame is adjustable to fit most 36" – 42" fireplaces. This appliance has specific sizing requirements for safe operation and may not fit or operate safely in all code compliant fireplace systems. Please review all the requirements listed below **PRIOR** to assembly or installation. If you are unsure how to properly take these measurements we recommend that you contact a F.I.R.E. Certified Inspector ([www.gotoFIRE.com](http://www.gotoFIRE.com)) or equally qualified hearth professional. There are some fireplaces where Earth's Flame will not fit or operate properly. An updated list of these fireplaces can be found @ [www.earthsflame.com](http://www.earthsflame.com) under the Technical Features Tab – "Will it Fit". Earth's Flame recommends you review this list prior to any attempted installation.

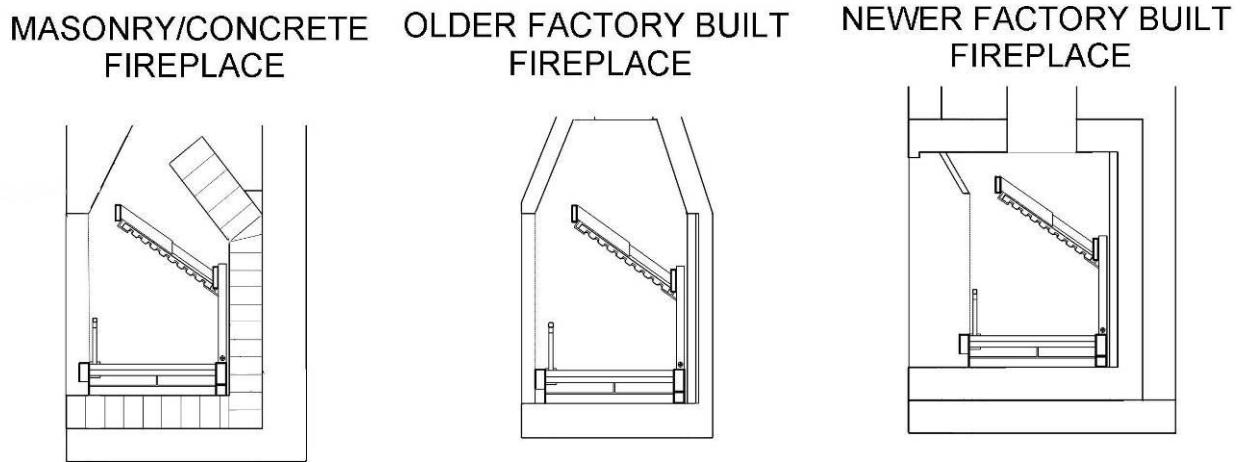
### ***Minimum Required Fireplace Floor - Width and Depth***



The back wall of the fireplace must be greater than 18" across. The depth of the floor measured from the back wall must be greater than 13 1/2". The width of the floor measured 12 1/2" from the back wall must greater than 26" wide.

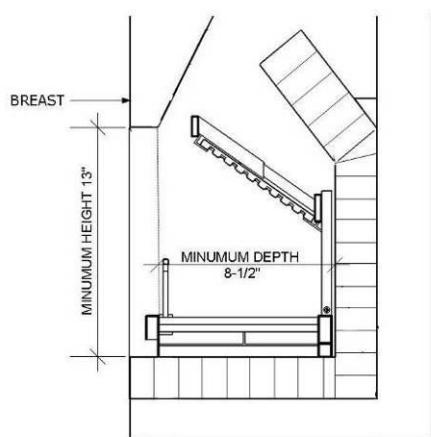
### **Minimum Fireplace Height and Configuration**

Please determine the TYPE of fireplace system in which you intend to install this accessory within based on the images listed below. Please be accurate on your assessment and choice of product.

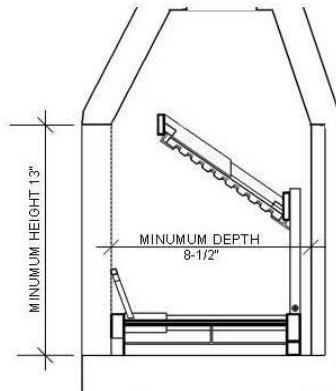


All fireplace openings must have a clear measurement of 13" or greater in height. This includes all clearances from the fireplace breast, smoke shield or any other obstruction. The inside depth of the firebox must be a minimum 8 1/2" as measured from the leading edge of the breast or smoke shield to the back wall of the fireplace as shown below.

**MASONRY/CONCRETE FIREPLACE**



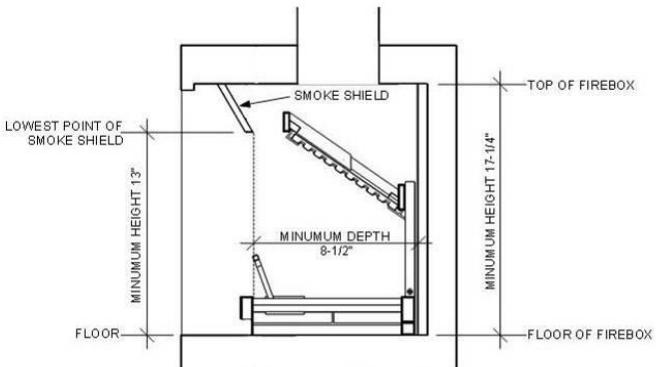
**OLDER FACTORY BUILT FIREPLACE**



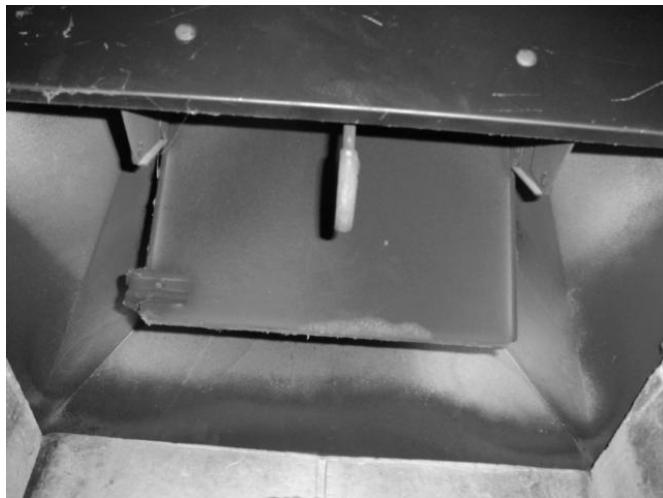
### **Newer Factory-Built Design**

For newer factory built fireplaces with a low or flat dome design, the minimum dimensions should also include 17  $\frac{1}{4}$ " measured from the floor to the top of the firebox as shown below.

### **NEWER FACTORY BUILT FIREPLACE**

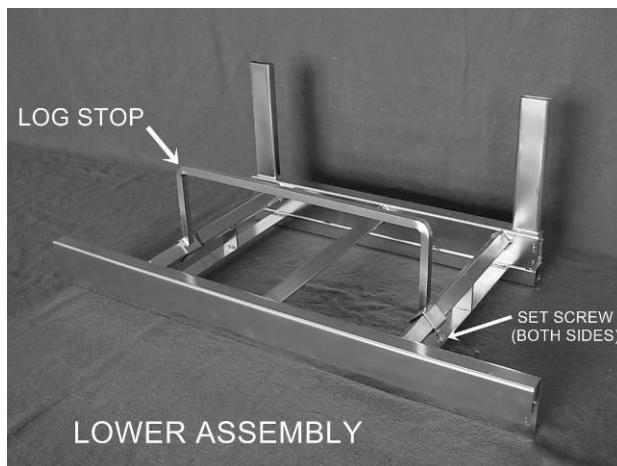


Do not install this accessory in a low or flat dome factory built fireplace that has a drop down damper system or any other type mechanical obstruction (as shown below) that may result in redirection of flame.

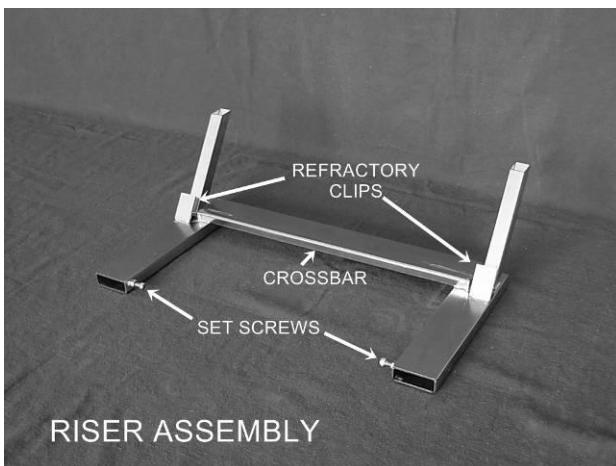


## ASSEMBLY

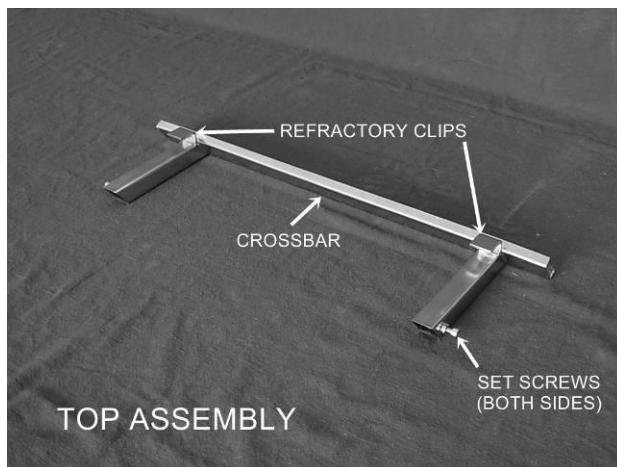
Earth's Flame has four pieces that must be assembled and adjusted to properly fit and operate safely in your fireplace. The four pieces are the Lower Assembly, Riser Assembly, Top Assembly, and Refractory Panel as shown below.



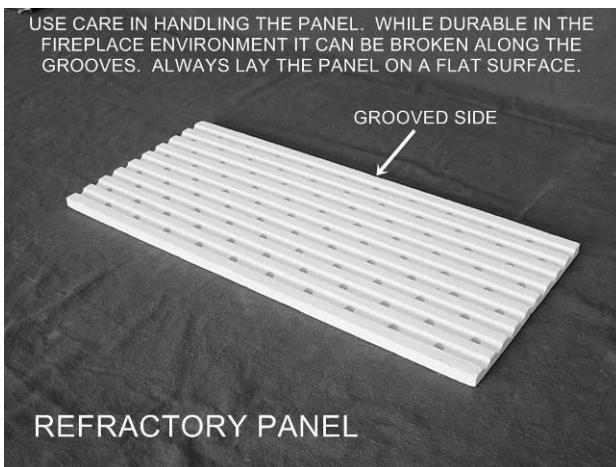
LOWER ASSEMBLY



RISER ASSEMBLY



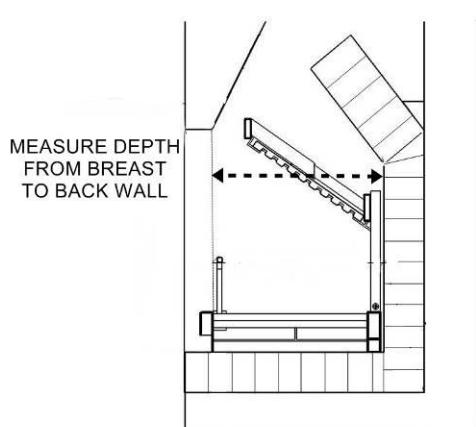
TOP ASSEMBLY



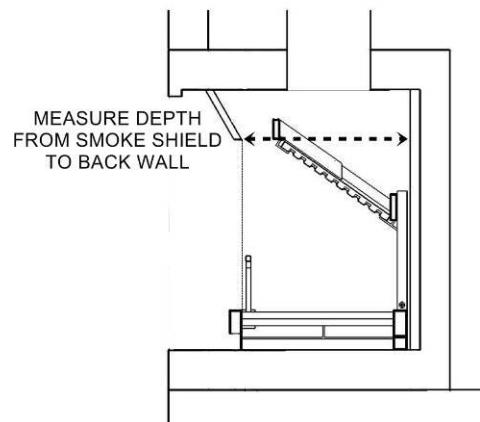
REFRACTORY PANEL

The first step in the assembly is to measure the distance from the back wall of your fireplace to the breast or smoke shield as shown below.

MASONRY/CONCRETE FIREPLACE



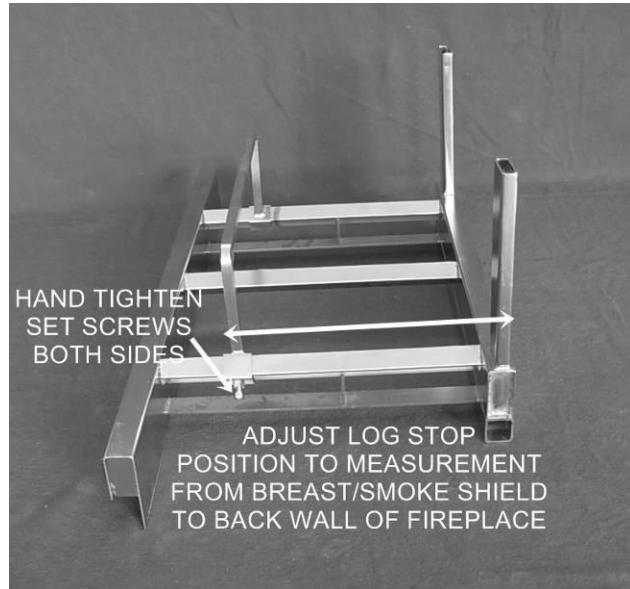
NEWER FACTORY BUILT FIREPLACE



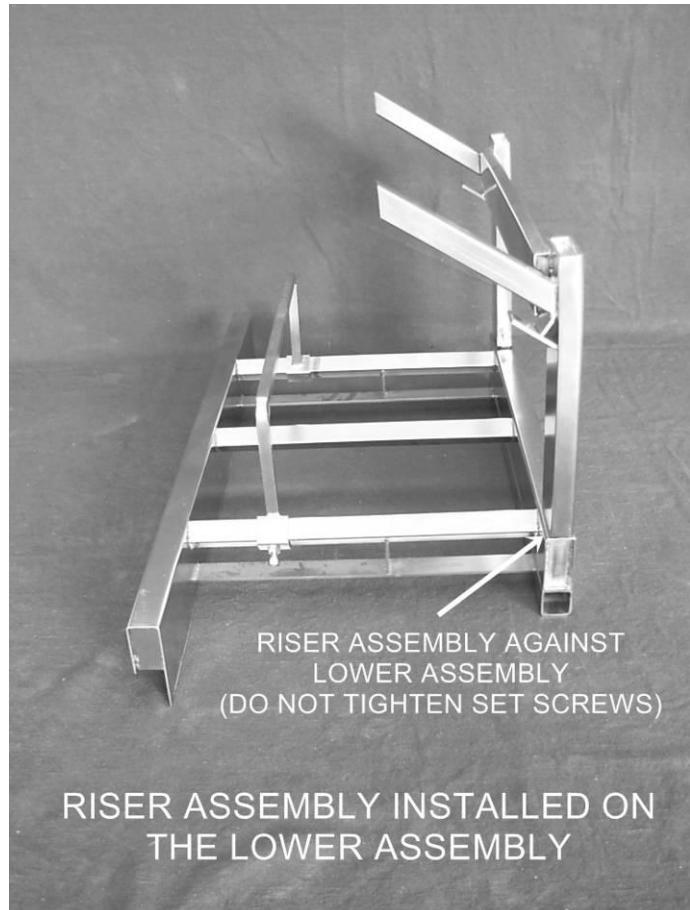
The measurement from the back of the Lower Assembly to the log stop must be no greater than the measurement from the back wall of the fireplace to the breast or smoke shield. Adjust the log stop to the same dimension measured. Hand tighten the two log stop set screws.

## **⚠ WARNING ⚠**

**Placing the log stop further forward than instructed may result in fire, personal injury, property damage or loss of life. Improper adjustment may also allow more wood in your fireplace than it is designed to accommodate.**



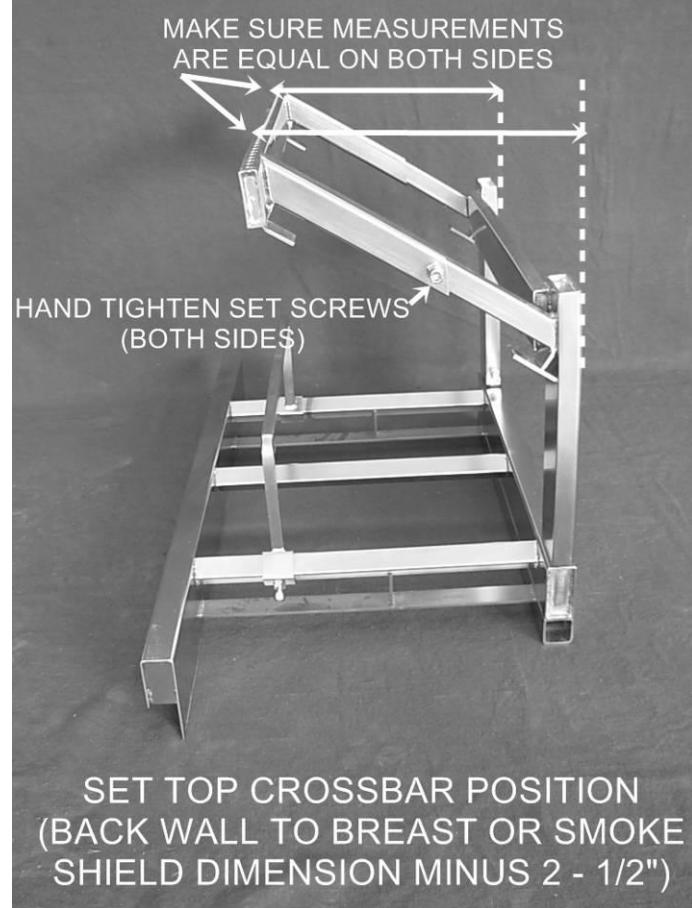
Next place the Riser Assembly on top of the Lower Assembly and slide it down until the two riser tubes are resting on the Lower Assembly. Do not tighten the two Riser set screws at this time.



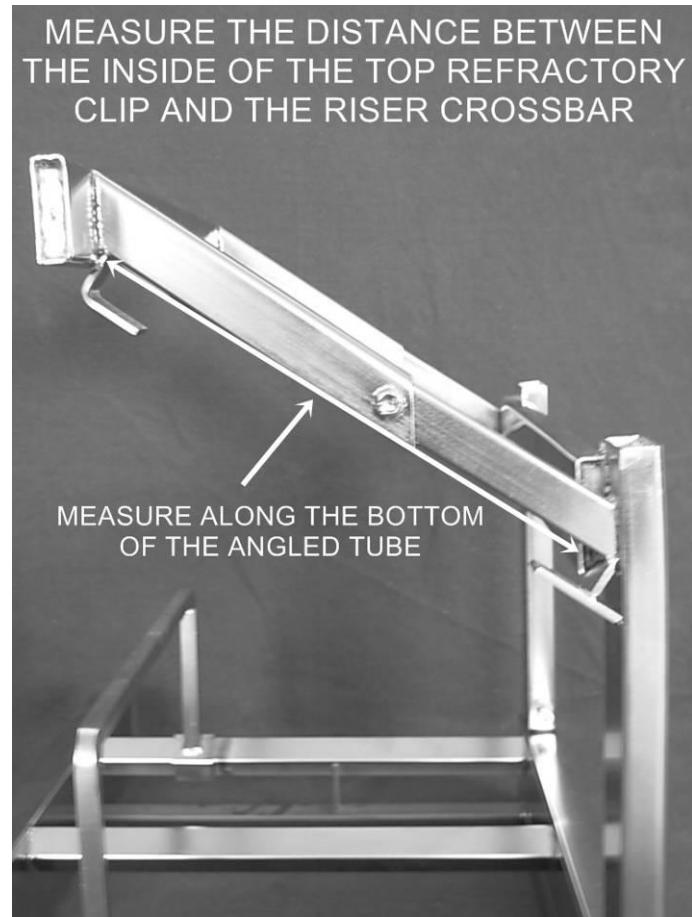
Take the measurement you made earlier from the back wall of the fireplace to the breast or smoke shield and subtract 2 ½" from this measurement. This will be the position of the top crossbar of the Top Assembly from the back wall. Install the Top Assembly and adjust the top crossbar to this measurement. Make sure the measurements are the same on both sides of the top crossbar. For fireplaces where the smoke shield or breast is greater than 12 ½" from the back wall set the top cross bar at its maximum design position of 10" from the back of the grate.

### **⚠️ WARNING ⚠️**

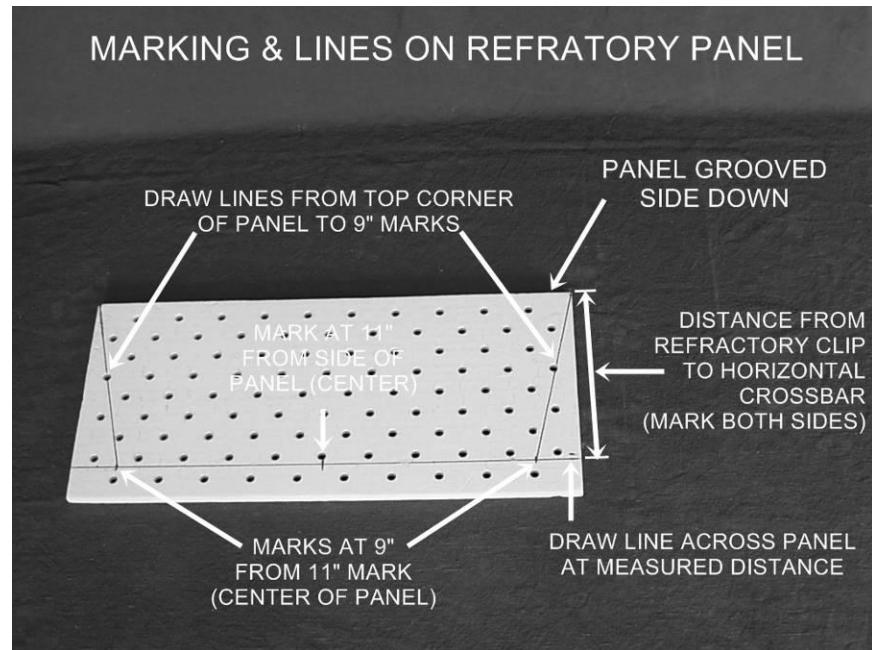
**Placing the top crossbar further forward than instructed may result in fire, personal injury, property damage or loss of life.**



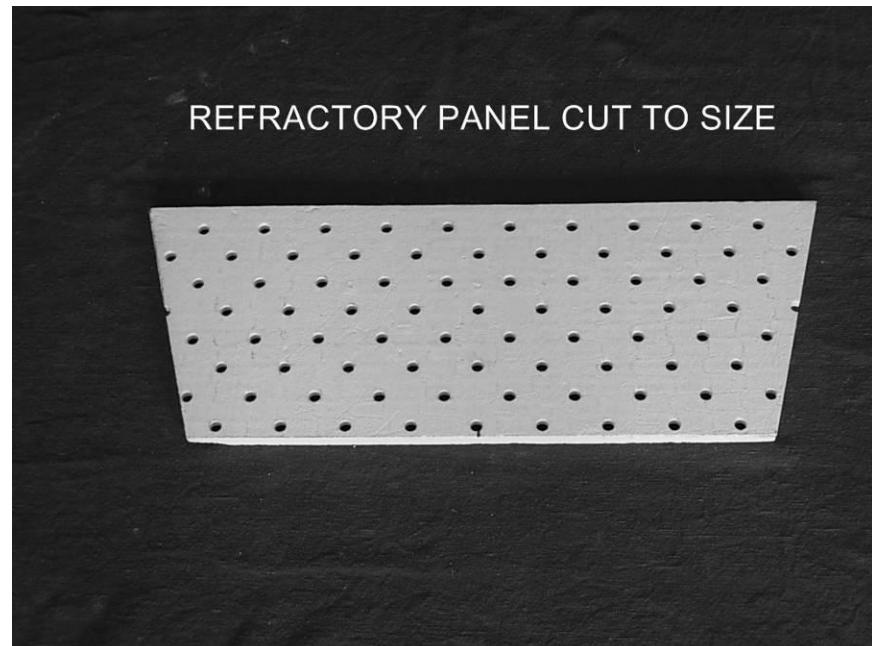
Measure the distance between the inside of the upper refractory clip and horizontal crossbar of the Riser Assembly as shown. Make your measurement along the bottom of the angled tube.



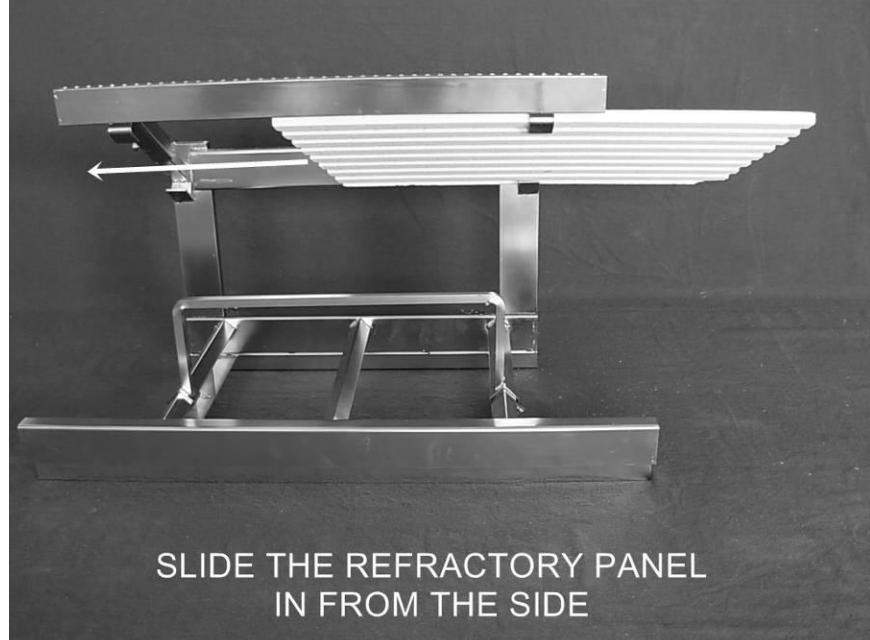
With the refractory panel groove side down on a flat surface mark the refractory panel in two locations from the top of the refractory panel. Using a metal straight edge draw a line across these marks. Now measure from the side of the refractory panel, along the line you just made and make a mark at 11". Now measure 9" either side of this mark and make a mark. Using your straight edge, draw a line from these marks to the top corner of the refractory panel.



Using a utility knife and the metal straightedge, cut along each one of the lines you just made. It is easiest to lightly score along each line and continue to cut through the board with successive strokes of the utility knife. Your refractory panel is now the correct size for your grate configuration.



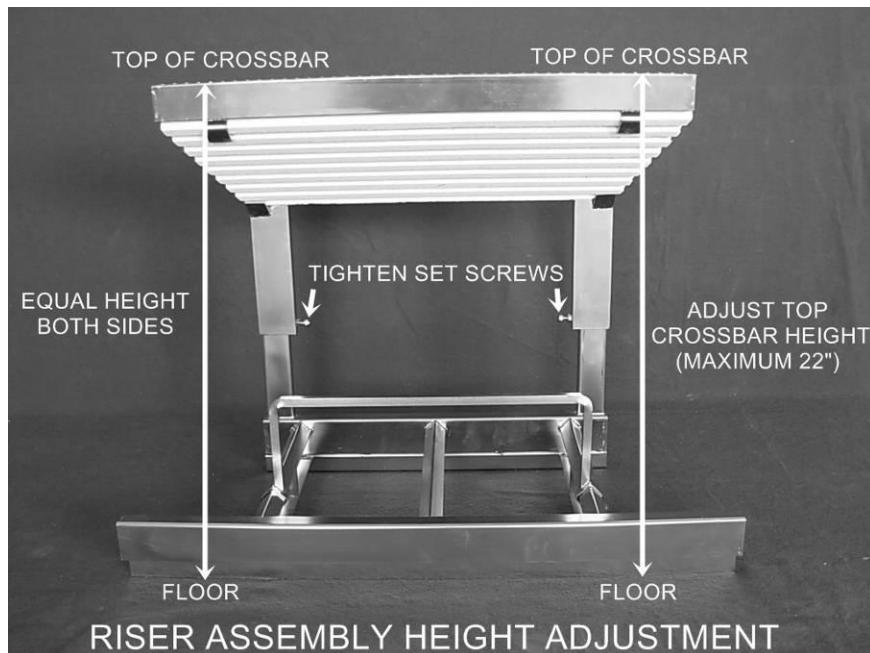
Slide the refractory panel into the refractory clips from the side. It may be necessary to loosen the Top Assembly set screws and slide the Top Assembly and Riser Assembly further apart.



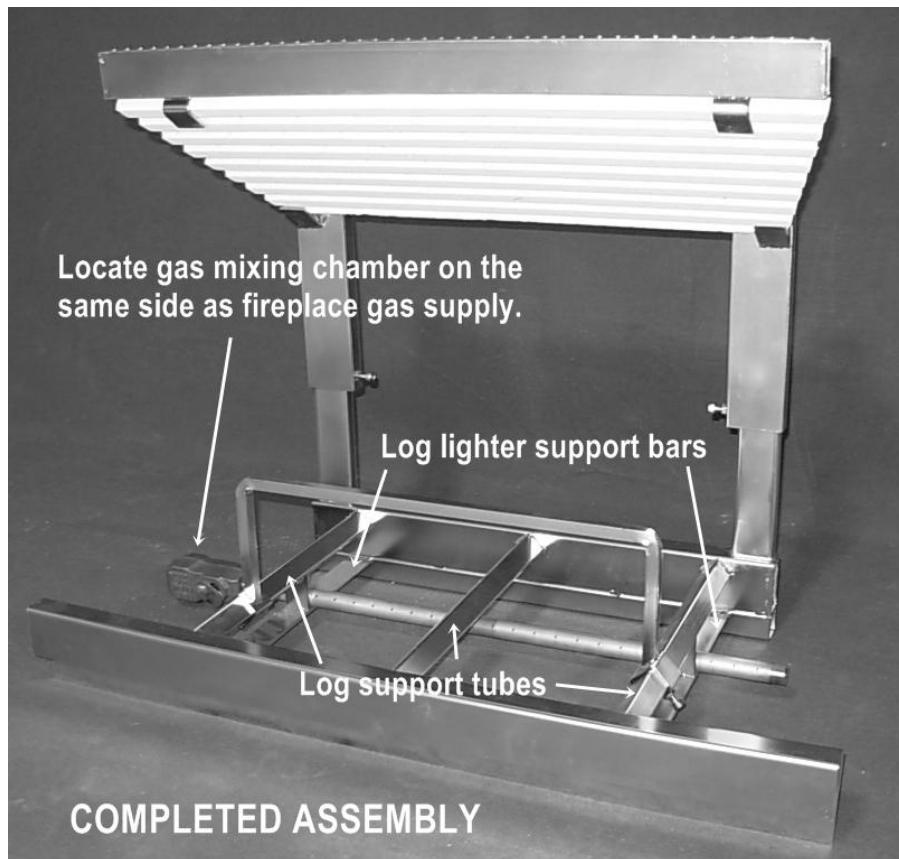
The refractory panel should be centered, the outside edges line up with the edges of the crossbar. Once the refractory panel is in place, slide the Top Assembly down until it is snug against the refractory panel. Hand tighten the Top Assembly set screws.



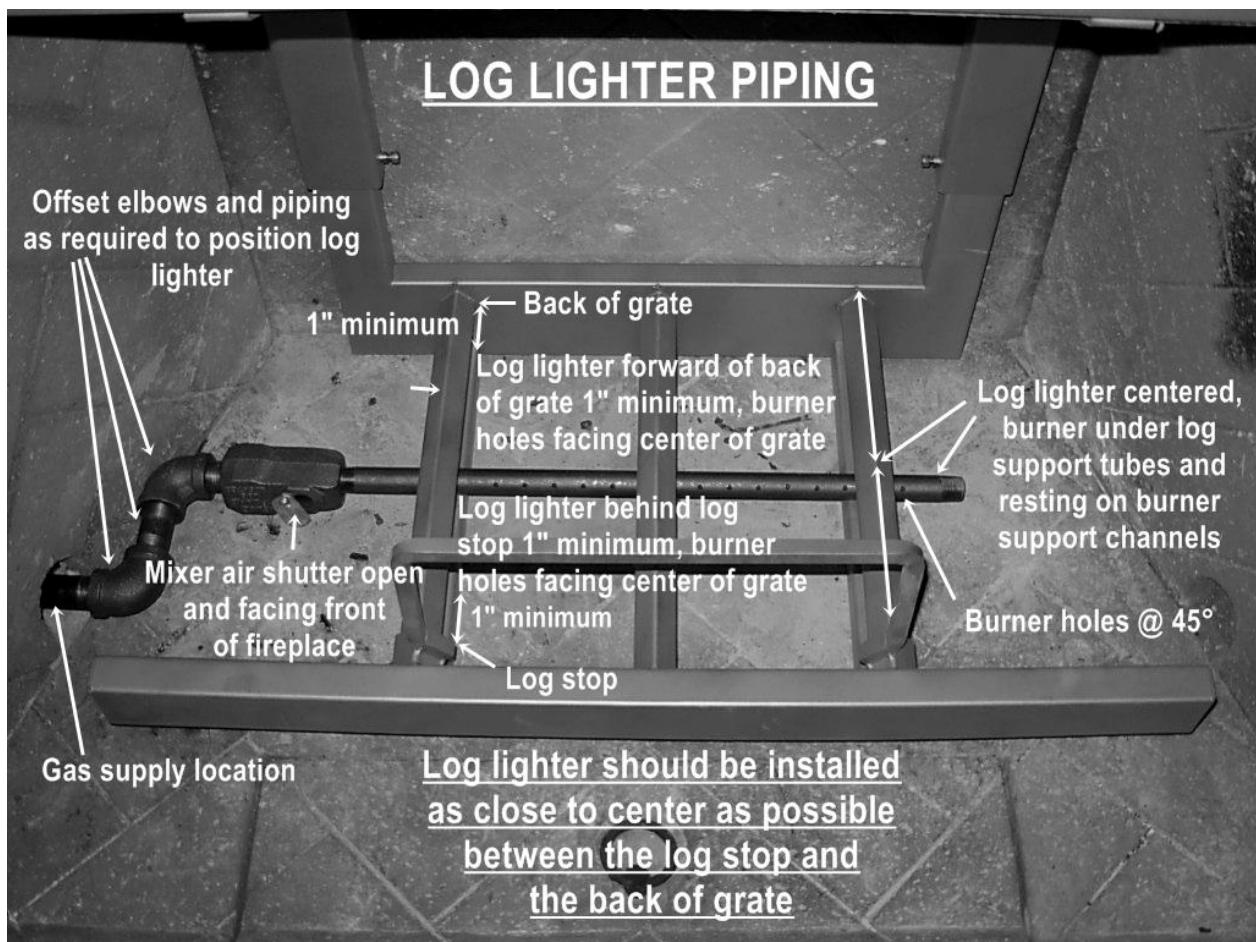
Measure the vertical height of your fireplace at the same distance from the back wall as your top crossbar is from the back wall. Subtract 2 1/4" from this measurement. Raise the riser section of the grate until the top of the Top Assembly crossbar is at this measurement. Hand tighten the set screws. The maximum design height of the top crossbar is 22", do not exceed this height.



With the Allen Wrench supplied, now tighten all set screws (6)  $\frac{1}{2}$  turn beyond the hand tight positions. Lay the supplied Blue Flame Log Lighter Model LLS-1626NG on the log lighter support bars, under the log support tubes, with the gas mixing chamber facing the same side of the fireplace as your gas supply. Place the completed assembly in the fireplace with the back of the grate fully against the back wall of the fireplace. Center the grate side to side in the fireplace.



Complete the installation and testing of the log lighter in accordance with the instructions supplied. It is best that the log lighter be centered between the log stop and the back of the grate. Gas supply locations vary in all fireplaces. It may be necessary to have your qualified professional install offset elbows and pipe so that the log lighter will be the correct height to insert under the log support tubes, resting on the log lighter support bars, and be a minimum of 1" forward of the rear of the grate and 1" behind the log stop (as shown below) for proper operation.



### **⚠️ IMPORTANT ⚠️**

As necessary, Earth's Flame updates the content of this manual on our website @ [www.earthsflame.com](http://www.earthsflame.com) under the Technical Features tab. We recommend you visit the website when installing Earth's Flame for any possible revisions to these installation and operating instructions.

## **⚠ WARNING ⚠**

**Earth's Flame recommends that your fireplace and chimney system be inspected by a qualified professional at the time of Earth's Flame installation to ensure there are no underlying deficiencies in the existing system.**

**It is important that your fireplace be operated in accordance with the manufacturer's operations manual. Pay particular attention to the manufacturer's instructions regarding glass door operation as not all fireplace glass doors are approved for operation with a log lighter in the door closed or other positions.**

**If your fireplace has any added accessories ensure that those accessories are installed properly, maintained, and operated according to the manufacturer's instructions.**

**Take a moment to review the installation and operating instructions contained in this and the log lighter manual to ensure the installation is in accordance with these manuals. When using your Earth's Flame for the first time after installation, monitor the fireplace operation. If smoke spillage or any other irregularity in fireplace operation occurs after installation cease fireplace operation and contact Earth's Flame before continuing to use the fireplace.**

**As with all wood burning appliances, continually monitor the fireplace and surrounding combustible surfaces for any signs of discoloring or deterioration due to heat. Cease operation of the fireplace if any irregularities are noticed and contact a qualified professional for inspection of the system before continuing operation.**

## **OPERATION**

The US EPA has a highly informative website, [www.epa.gov/burnwise](http://www.epa.gov/burnwise). Earth's Flame highly recommends visiting this website for a discussion of safe burn practices.

Earth's Flame recommends the following general practices when building a fire:

- Make sure your flu is OPEN!!!
- Make sure that your fireplace and chimney are clean and in good shape.
- Remove any combustibles from the fireplace area.
- Make sure the log lighter gas valve is in the OFF position.
- Make sure that shutter on mixing chamber is open to ensure that air and gas is being mixed. The flames should be blue when ignited.
- Before building a fire in your fireplace, make sure that the fireplace has been cleaned-out thoroughly and all ashes have been properly removed.
  - Hot coals could cause premature ignition of the log lighter if not removed.
  - Ashes should be placed in a metal container with a tight fitting lid.
  - The closed container should not be placed on a combustible floor, and kept away from other combustible materials until the ashes have cooled sufficiently.

- Before disposing of ashes, ensure they have cooled thoroughly.
- When selecting wood to use in your fireplace, make sure that the wood is well seasoned and dry.
  - Freshly cut wood is usually wet inside it and is not recommended for use.
- Use soft woods, such as pine, for kindling to start the fire.
- Use hard woods, such as oak, to maintain the fire.
- Start your fire with a layer of crisscrossed kindling (1/2 – 1" width) and lay 2 or 3 slightly larger pieces of hardwood (1" – 3" width) above the kindling, side to side in the fireplace.
- Air space is crucial to a good fire.
  - Take care and ensure there is an air gap between these pieces of wood or when placing a new piece of wood on the fire.



- Do not allow any wood to be forward of the grate log stop at any time during the fire.
- If the fireplace is equipped with glass doors, the doors shall be opened for at least 5 minutes before attempting to light the log lighter.
- Light the burner by using a long fireplace match or a lit paper under the center of the lighter near the burner ports.
- Turn the gas valve ON gradually until burner ignition occurs.
  - If burner does not light with five seconds, turn gas valve OFF and wait 5 minutes before trying to relight.

- In case of burner outage, the gas supply shall be turned off and the doors left open for at least 5 minutes before attempting to relight the device.
- Fire screens are considered a requirement with this product. The screens should always be in the closed position with the exception of fuel loading.
- Do not close glass doors unless the fireplace has been certified for use with log lighter and closed door operation.
- To achieve the maximum emissions reducing capabilities and other benefits of Earth's Flame, the log lighter is designed to be operated continuously while burning wood in your fireplace.
- As the fire burns continue to add progressively larger pieces of hardwood to the fire as needed but not as to exceed the recommended volume listed above.
- One key to maintaining a good fire is to produce red, glowing, embers that pile up underneath your grate.
  - As soon as you have a good pile of embers you'll be able to add new firewood and it will ignite immediately.
- Never leave a fireplace unattended.
- Allow sufficient time for the fire to "burn down" before leaving the area
  - Do not add any more wood to the fire well in advance (2-3 hours in some cases)
- When there are no more visible flames from the burning wood, turn the gas supply valve to the off position.
- Remove gas valve key and place in a safe location out of reach of small children.

## **CARE & MAINTENANCE**

Earth's Flame is durably constructed of 304 Stainless Steel providing a long life of service. There is no regular maintenance required other than ash removal. Ash removal can be accomplished with a standard fireplace tool set or an ash vacuum. When using an ash vacuum be sure and follow the manufacturer's instructions paying particular attention to hot ashes in the fireplace.

The refractory panel used in Earth's Flame is very durable in the fireplace environment. It can be broken if it is heavily impacted with logs or fireplace tools. Be careful when putting logs into the fireplace, moving logs in the fireplace, or when cleaning ashes. Should it become necessary a replacement panel can be obtained from Earth's Flame and installed per the instructions contained in this manual.

If Earth's Flame is ever removed from the fireplace make sure that the dimensions of the grate, as outlined in this instruction manual, have not changed before re-inserting the grate into the fireplace. Make sure the set screws are tight before reinserting the grate. Review the installation instructions and ensure the system is configured correctly before it is re-installed.

### **Still Have Questions?**

**Remember that improper installation, adjustment, or any alteration of the Earth's Flame product can cause injury, property damage or loss of life. Should you have any questions relating to the proper installation or operation of the Earth's Flame product, please contact a qualified installer or local distributor before any attempted operation of the product, or you may reach Earth's Flame directly at 888- 201- 8805.**